UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
Division of Forest Insect Investigations

FOREST INSECT CONDITIONS
BIG BEAR DISTRICT, SAN BERNARDINO NATIONAL FOREST
AUGUST, 1953 RECONNAISSANCE SURVEY

On August 25, 1953, a reconnaissance of the Big Bear District, San Bernardino National Forest, was made by G. L. Downing, to determine the present status of insect populations within the area. Included in this survey were the Holcomb Valley and Upper Holcomb Creek, Big Bear Lake and adjacent area, and Bear Creek Basin (see map). Following are an account of conditions encountered and recommendations on the various areas visited.

Holcomb Valley and Upper Holcomb Creek

This is an area of mixed ownership involving some private land, many mining claims and the remainder under the jurisdiction of the U. S. Government. The private land involved lies mainly within Sections 31 and 32 of T.3N R.1E. For the most part the land is fairly flat with gentle rolling hills and therefore easily accessible.

Jeffrey pine is by far the most predominant species present and in some areas makes up 100 percent of the stand. Other tree species present are white fir, incense cedar and sugar pine, mostly on the north facing slopes and western juniper and pinon pine on the flats. In most of this area old growth predominates.

There is considerable loss in the Jeffrey pine occurring throughout Holcomb Valley and along Holcomb Creek. This loss is due to the activities of two primary forest insects, namely the Jeffrey pine beetle, Dendroctonus jeffreyi Hopk. and the California flatheaded borer, Melanophila californica Van Dyke. Of the two, the Jeffrey pine beetle appears to be causing the most damage. However, the California flatheaded borer was found to be working in association with this barkbeetle in most cases. The other tree species within this area appear to be free from insect attack at the present time, except for a little activity by the fir engraver beetle, Scolytus ventralis Lec. in the white fir on the south side of Holcomb Creek. The extent of the infestation was not determined.

It was observed that an appreciable portion of the stand in Holcomb Valley is high risk and may serve as a source of brood trees for the beetles emerging from currently infested trees already in the area.

Recommendations

1. That the Forest Insect Laboratory make an appraisal survey in the fall to determine the amount of currently infested, salvable abandoned and high risk trees by volume in this zone of infestation.

2. That where possible all Jeffrey pines that are currently infested, salvable abandoned and high risk be removed by logging.

3. That where it is impractical to log out the currently infested Jeffrey pines, they be treated by direct control methods. Direct control methods to be outlined by the Forest Insect Laboratory at a later date.

Big Bear Lake and Vicinity

In this area, comprising the Valley proper and running to the ridges on both the north and south, there is a big block of private land which encircles the Lake on all sides and extends up the mountain on the south side of the Lake in several places. The remainder of the land belongs to the U. S. Government. In the floor of the Valley around the Lake the land is flat and easily accessible, but it becomes increasingly steeper to the ridges on both sides.

For the most part, cabin sites, organizational camps and winter sports locations make up the bulk of the recreational value in this area.

At lower elevations and on the north side of the Lake Jeffrey pine and western juniper are the only tree species of any consequence. However, considerable sugar pine, incense cedar and white fir occur on the slopes of the mountain on the south side of the Lake. No ponderosa pine was observed, although it may occur in some local areas.

Very little insect activity was observed in this area except in the immediate vicinity of Big Bear Village, where between fifteen and twenty-five currently infested Jeffrey pines were noted. The insects responsible for the damage are the same two found in Holcomb Valley, namely the Jeffrey pine beetle and the California flatheaded borer. There are only a handful of current fades around the rest of the entire Lake area. The insect buildup of a few years back has apparently died out and no further serious losses are anticipated in the immediate future.

Recommendations

1. That the private land owners around Big Bear Village be encouraged to have the currently infested and salvable abandoned trees removed by a logging operator.

2. That this type of salvage logging be extended to the whole of this area to pick up any and all new fades as they show up in the future. This is an area that is flat and very accessible and would lend itself to this type of management.

3. That a close watch of the area around Big Bear Village be made to detect any increases in the activity now present there.

Head of Bear Creek

At the lower end of Big Bear Lake, there occurs a large basin which drops off very steeply into Bear Creek and its tributaries. This basin is inaccessible, except on foot, and is entirely Government-owned, except for possibly a few mining claims. The stand is a mixture of Jeffrey pine, white fir, sugar pine and incense cedar.

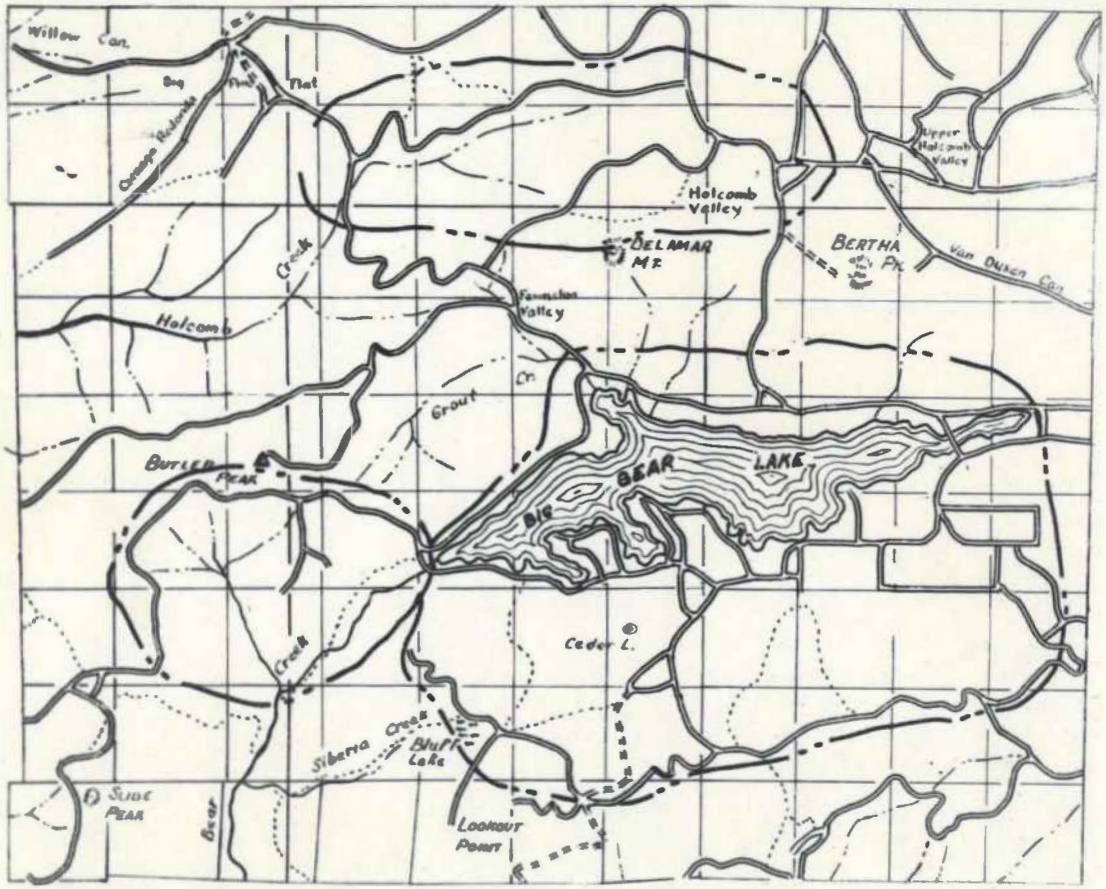
Insect activity is quite noticeable and is due primarily to the fir-engraver beetle, Scolytus ventralis Lec. in white fir. There is some loss in both the Jeffrey pine and sugar pine, probably due to the Jeffrey pine beetle and California flatheaded borer in the Jeffrey pine, and the mountain pine beetle, Dendroctonus monticolae Hopk. in the sugar pine.

Recommendations

Inasmuch as this is an area of low recreational value and that very little is as yet known about the control of the fir engraver beetle, it is recommended that no control be undertaken at the present time. This area should, however, be kept under surveillance in case some form of action is necessary in the future.

Forest Insect Laboratory
Berkeley, California
October 9, 1953

G. L. Downing
Entomologist



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BERKELEY FOREST INSECT LABORATORY

BIG BEAR INFESTATION AREA

SAN BERNARDINO COUNTY, CALIFORNIA

SAN BERNARDINO MERIDIAN

BOUNDARY OF CONTROL UNIT.

SCALE

In 0 ½ 1 2 3 Miles